



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,889	11/05/2003	R. Mark Halligan	7208-90742	7856

24628 7590 02/24/2005

WELSH & KATZ, LTD  
120 S RIVERSIDE PLAZA  
22ND FLOOR  
CHICAGO, IL 60606

EXAMINER

BOYCE, ANDRE D

ART UNIT	PAPER NUMBER
----------	--------------

3623

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/701,889

Applicant(s)

HALLIGAN ET AL.

Examiner

Andre Boyce

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/17/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-52 have been examined.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1, 2, 5, 8, and 11-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter.

For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case the independent claim 1 only recites an abstract idea. The recited steps of collecting sets of trade secret information, analyzing the collected sets, and generating a report does not

Art Unit: 3623

involve, use, or advance the technological arts (i.e., computer, processor, electronically, etc.), since the steps could be performed using pencil and paper.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case the claimed invention analyzes information and generates a report, thereby producing a useful, concrete, and tangible result, but not within the technological arts as explained above.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katz et al (US 2003/0158745), in view of Jacobsen et al (USPN 6,167,397).

As per claim 1, Katz et al disclose a method of discovering trade secrets of an organization (i.e., system for a company to develop and maintain intellectual capital, ¶ 0005), such method comprising the steps of: collecting sets of trade secret information from a plurality of persons of the organization (i.e., user enters information regarding new innovation via tab 500, ¶ 0040), and generating a report regarding the identified trade secrets of the organization (i.e., innovations folder 600,

containing one entry for each innovation, ¶ 0043). Katz et al does not disclose analyzing the collected sets of trade secret information using logical and mathematical formulae to identify and eliminate any redundancy among the sets of trade secret information to define a collection of potential trade secrets of the organization. Jacobsen et al discloses an algorithm for clustering of documents (i.e., trade secret information) matching queries based on occurrence of terms, whereby weighing the terms using a standard measure results in identification of a small number of clusters (i.e., defining a collection of similar documents, column 2, lines 46-52). In addition, Jacobsen et al discloses the clustering of documents employed as a post search analytical tool (column 6, lines 19-23), thereby supplementing the Katz et al innovations query page 1200 (¶ 0050). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the elimination of redundancy via the clustering of documents in Katz et al, as seen in Jacobsen et al, as an efficient means of searching in a set of structured documents.

As per claim 2, Katz et al disclose correlating among the sets of trade secret information having at least some redundant entries to identify sets of trade secret information that are related by redundancy and sets of trade secret information that are unrelated (i.e., the innovation query page 1200 allows the user to execute searches based upon various attributes of the abstract, ¶ 0050). Katz et al does not explicitly disclose integrating redundant entries among the respective sets into compiled sets of trade secret information with non-redundant entries that together

with the sets of trade secret information with unrelated entries define a collection of potential trade secrets. Jacobsen et al provides for clustering of documents (i.e., trade secret information) matching queries based on occurrence of terms, whereby weighing the terms using a standard measure results in identification of a small number of clusters (i.e., defining a collection of similar documents, column 2, lines 46-52). Further, Jacobsen et al disclose an infrequent matching, where a document and record may be joined based on a high probability of being semantically related (column 7, lines 6-10). In addition, Jacobsen et al discloses the clustering of documents employed as a post search analytical tool (column 6, lines 19-23), thereby supplementing the Katz et al innovations query page 1200 (¶ 0050). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include integrating redundant entries with non-redundant entries in Katz et al, as seen in Jacobsen et al, as an efficient means of searching in a set of structured documents.

As per claims 3 and 6, Katz et al disclose conducting interviews of each person of the plurality of persons over an electronics communications network (e.g., information acquired from users via network 10, ¶ 0033).

As per claim 4, Katz et al disclose downloading a web form containing a plurality of information entry fields that request trade secret information from each person of the plurality of persons (i.e., users accesses web pages via user interface and access new innovation page 500, ¶¶ 0039, 0043).

As per claim 5, Katz et al disclose collecting information from each person of the plurality of persons regarding the identities of a plurality of other persons who may have information about the trade secrets of the organization (i.e., peernet access link 618 that allows users to locate and store profiles of professionals with expertise in the particular innovation, ¶ 0058).

As per claim 7, Katz et al disclose downloading a web form containing a plurality of information entry fields that request said identities from each person of the plurality of persons (i.e., users accesses web pages via user interface and access peernet access link 618 that allows users to locate and store profiles of professionals with expertise in the particular innovation, ¶¶ 0043, 0058).

As per claim 8, Katz et al disclose collecting information from each person of the plurality of persons regarding the locations of the trade secrets of the organization (i.e., locations of trade secrets may be found in innovations folder 600, ¶ 0043).

As per claim 9, Katz et al disclose conducting interviews of each person of the plurality of persons over an electronics communications network (i.e., user entered information, based on template of main page 40 and new innovation page 500, maintained by network administrator, ¶¶ 0038-39) .

As per claim 10, Katz et al disclose downloading a web form containing a plurality of information entry fields that request said information on locations from each person of the plurality of persons (i.e., users accesses web pages via user interface and innovations folder 600, ¶¶ 0043-44).

As per claim 11, Katz et al disclose the step of correlating further comprises matching respective information entry fields of the plurality of fields of the trade secret information entries and marking trade secret information entries with matching fields as belonging to a single potential trade secret group (i.e., matched entries are listed in order of relevance to the search terms and saved in the internal abstracts folder based on the selected innovation, ¶ 0057).

As per claim 12, Katz et al disclose a field for a subject matter of the trade secret (i.e., abstract 1204, ¶0050).

As per claim 13, Katz et al disclose a field for a format of the trade secret (i.e., general classification 1214, ¶ 0050).

As per claim 14, Katz et al disclose a field for a product or service enhanced by the trade secret (i.e., applications, ¶ 0050) .

As per claim 15, Katz et al disclose the step of correlating further comprises performing key word searching of the plurality of fields of each potential trade secret group (i.e., user submits search query S104 and determines where to search S106, figure 14).

As per claim 16, Katz et al does not disclose improving the performance of said correlation by replacing any keywords encountered that are associated with a corresponding master keyword in a table of synonym keywords with the corresponding master keyword. Jacobsen et al disclose an attribute/value index, wherein a collection of attributes is stored (i.e., master index) and matched at a later time, similar to a table to synonym keywords. In addition, Jacobsen et al discloses

Art Unit: 3623

the clustering of documents employed as a post search analytical tool (column 6, lines 19-23), thereby supplementing the Katz et al innovations query page 1200 (¶ 0050). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a table of synonym keywords in Katz et al, as seen in Jacobsen et al, as an efficient means of searching in a set of structured documents.

As per claims 17-18, Katz et al does not disclose subdividing each potential trade secret group into more specific sub-groups based on the analysis of keywords contained in the plurality of fields and where each sub-group has at least a predefined number of keywords in common. Jacobsen et al disclose documents clusters created and scored based upon the diversity of matches of documents (column 3, lines 12-15). In addition, Jacobsen et al discloses the clustering of documents employed as a post search analytical tool (column 6, lines 19-23), thereby supplementing the Katz et al innovations query page 1200 (¶ 0050). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the analysis of keywords where each sub-group has at least a predefined number of keywords in common in Katz et al, as seen in Jacobsen et al, as an efficient means of searching in a set of structured documents.

As per claims 19-20, Katz et al does not disclose using common keywords from keyword fields of multiple potential trade secret entries and using non-common keywords and their frequency of occurrence in the keyword field of multiple potential

trade secret entries being integrated as a common/non-common keyword field in the resulting non-redundant trade secret entry. Jacobsen et al disclose determining the similarity between documents by determining the co-occurrence of infrequently occurring (i.e., non-common) terms in the vicinity of query (i.e., common) keywords (column 3, lines 63-67). In addition, Jacobsen et al discloses the clustering of documents employed as a post search analytical tool (column 6, lines 19-23), thereby supplementing the Katz et al innovations query page 1200 (¶ 0050).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include using common and non-common keywords and their frequency of occurrence in Katz et al, as seen in Jacobsen et al, as an efficient means of searching in a set of structured documents.

As per claims 21-23, Katz et al does not disclose forming predetermined mathematical quantities, an arithmetic mean, or a standard deviation to represent a characteristic value and an error range for each numerical field of the plurality of trade secret entries being integrated. Jacobsen et al disclose using statistically and logarithm analysis to achieve a flattening effect that gives importance to the number of term occurrences (column 3, lines 37-41). In addition, Jacobsen et al discloses the clustering of documents employed as a post search analytical tool (column 6, lines 19-23), thereby supplementing the Katz et al innovations query page 1200 (¶ 0050). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include forming predetermined mathematical quantities, an arithmetic mean, or a standard deviation to represent a characteristic

value and an error range in Katz et al, as seen in Jacobsen et al, as an efficient means of searching in a set of structured documents.

As per claims 24-26, Katz et al disclose generating data mining signatures, content filtering signatures, or electronic document scanning signatures from the collected trade secret information, or by the results of logical or mathematical formulae applied thereto (i.e., various levels of access determine how much of each entry can be viewed, based upon password and user-defined access control, ¶¶ 0034, 0041).

Claims 27-52 are rejected based upon the rejection of claims 1-26, since they are the system claims corresponding to the method claims.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Ohlemacher et al (USPN 5953702) disclose a document audit system.

-Donner (USPN 6154725) discloses an intellectual property (IP) audit system that estimates a value of an IP portfolio.

-Wilkinson (US 2002/0077942) discloses auditing one or more IP assets of an entity.

Art Unit: 3623

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (703) 305-1867. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



adb  
February 21, 2005



TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600